



**UNIVERSITI PUTRA MALAYSIA**

**FACTORS AFFECTING STUDENTS' ONLINE SHOPPING ATTITUDE  
AND PURCHASE INTENTION**

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**FACTORS AFFECTING STUDENTS' ONLINE SHOPPING ATTITUDE AND  
PURCHASE INTENTION**

**By**

**NARGES DELAFROOZ**

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in  
Fulfilment of the Requirement for the Degree of Doctor Philosophy**

**September 2009**



## **DEDICATIONS**

**This thesis is dedicated to my:**

**Mother & Father**

**Respectively:**

**and**

**Husband**

*Sina Siavash Moghaddam*

**With innermost and everlasting affection and love.**

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor Philosophy

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**September 2009**

**Chairman : Associate Professor Laily Paim, PhD**

**Faculty : Human Ecology**

The ever-increasing use of the Internet in Malaysia provides a developing prospect for E-marketers. Such marketers' awareness of the factors affecting Malaysian's shopping attitudes and intentions is crucial to further develop their marketing strategies in converting potential customers into active ones, while maintaining the existing online customers.

Purchase intention is an important determinant of online shopping behavior and represents the best estimates of future behavior available to market researchers. From an e-commerce perspective, understanding of the Theory of Reasoned Action, Theory Planned Behavior, and Technology Acceptance Model could provide a valid basis for explaining and predicting consumers' intentions towards adopting online shopping behavior.

This study sets out to examine the factors influencing students' online shopping attitudes and intentions at Universiti Putra Malaysia (UPM) through a five-point Likert scale self-administered questionnaire. The instrument has demonstrated acceptable levels of internal consistency, reliability, and content validity according to previous documented studies. A sample of 370 students was selected among postgraduate students at Universiti Putra Malaysia. Descriptive analysis, Pearson correlation, partial correlation, multiple regression, and path analysis were employed to achieve the objectives of the study.

The results of the study showed that the level of online shopping intention was relatively high and direction of attitude towards online shopping was positive among the postgraduate students. Moreover, it was found that utilitarian orientation and hedonic orientation, perceived benefits and demographic characteristics (gender, age, and income) were significantly and positively correlated with the attitude towards online shopping. In addition, the result revealed that the perceived behavioural control and attitude were significantly and positively correlated with online shopping intention. Finally, the finding identified that the trust in the construct of perceived behavioural control and attitude had higher direct effect whereas utilitarian orientation, convenience, prices and wider selection, and income had higher indirect effect on the students' online shopping intention.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah doktor Falsafah

**FAKTOR YANG MEMPENGARUHI SIKAP PEMBELIAN DAN NIAT PEMBELIAN  
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Penggunaan internet yang semakin meningkat di Malaysia menyediakan prospek untuk maju kepada e-dagang. Kesedaran terhadap faktor-faktor yang mempengaruhi sikap dan niat pembeli Malaysia boleh digunakan untuk membentuk strategi pemasaran yang akan menukar pelanggan berpotensi kepada pelanggan yang aktif dan pada masa yang sama mengekalkan pelanggan atas talian yang sedia ada.

Niat adalah penentu penting kepada perlakuan pembelian secara atas talian dan memberikan anggaran yang terbaik mengenai perlakuan masa hadapan kepada penyelidik tentang pasaran. Dari perspektif e-dagang, memahami teori *Theory of Reasoned Action*, *Theory Planned Behavior*, dan *Technology Acceptance Model* boleh menjadi asas yang sah untuk menerang dan meramalkan niat pengguna ke arah menerima pakai perlakuan pembelian secara atas talian.

Kajian ini dijalankan bertujuan untuk memeriksa faktor-faktor yang mempengaruhi sikap dan niat pembelian secara atas talian dalam kalangan pelajar di Universiti Putra Malaysia melalui soal selidik tadbir-sendiri berskala Likert lima tahap. Instrumen mempunyai tahap konsistensi dalaman, kesahihan dan kesahan yang boleh diterima berdasarkan kajian lalu. Sejumlah 370 sampel telah dipilih dalam kalangan pelajar pasca siswazah di Universiti Putra Malaysia. Analisis deskriptif, Korelasi Pearson, korelasi *separa*, regresi pelbagai, dan analisis *laluan* dijalankan untuk mencapai objektif kajian.

Dapatan kajian menunjukkan tahap niat pembelian secara atas talian agak tinggi dan arah sikap terhadap pembelian secara atas talian didapati positif dalam kalangan pelajar pasca siswazah. Tambahan pula, didapati orientasi *utilitarian* dan *hedonic*, faedah yang ditanggapi dan ciri demografi (gender, umur dan pendapatan) menunjukkan perkaitan yang positif dan signifikan dengan niat ke arah pembelian secara atas talian. Juga, dapatan kajian menunjukkan kawalan perlakuan yang ditanggapi dan sikap adalah berkait secara positif dan signifikan dengan niat pembelian secara atas talian. Akhirnya, dapatan kajian menunjukkan bahawa elemen kepercayaan dalam konstruk kawalan perlakuan yang ditanggapi dan sikap mempunyai kesan arah yang lebih tinggi ke atas niat pembelian secara atas talian dalam kalangan pelajar.

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**Sincerely**

**Narges Delafrooz**



I certify that a Thesis Examination Committee has met on 4 September 2009 to conduct the final examination of Narges Delafrooz on her thesis entitled "FACTORS AFFECTING STUDENTS' ONLINE SHOPPING ATTITUDE AND PURCHASE INTENTION" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the relevant degree of Doctor of Philosophy.

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## **DECLARATION**

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently, submitted for other degree at University Putra Malaysia or at any other institution.

---

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Date: 2 October 2009

## TABLE OF CONTENTS

	<b>Page</b>
<b>DEDICATION</b>	ii
<b>ABSTRACT</b>	iii
<b>ABSTRAK</b>	v
<b>ACKNOWLEDGEMENTS</b>	vii
<b>APPROVAL</b>	viii
<b>DECLARATION</b>	x
<b>LIST OF TABLES</b>	xiii
<b>LIST OF FIGURES</b>	xv
<b>LIST OF ABBREVIATIONS</b>	xvi
 <b>CHAPTER</b>	
 <b>1 INTRODUCTION</b>	
1.0 Introduction	1
1.1 Problem Statement	4
1.2 Research Question	7
1.3 Objective	7
1.4 Hypothesis	8
1.5 Significant of Study	8
1.6 Organization of the Thesis	11
 <b>2 LITERATURE REVIEW</b>	
2.0 Introduction	13
2.1 The Internet, E-commerce and Online Shopping	13
2.2 Online Purchase Intention	18
2.3 Online Shopping Attitude	19
2.4 Online Shopping Orientations	22
2.5 Online Shopping Perceived Benefits	27
2.6 Perceived Behavioural Control	36
2.7 Chapter Summary	46
 <b>3 THEORITICAL FRAMEWORK</b>	
3.0 Introduction	47
3.1 Theory Reasoned Action (TRA)	48
3.2 Theory Planned Behavior (TPB)	50
3.3 Technology Acceptance Model (TAM)	54
3.4 Conceptual Framework	57
3.5 Chapter Summary	61
 <b>4 METHODOLOGY</b>	
4.0 Introduction	63
4.1 Research Design	64
4.2 Study Population	66



4.3	Sample Size	67
4.4	Sample Procedure	71
4.5	Instrument Development	74
4.6	Validity and Reliability of the Instrument	81
4.7	Data Collection	86
4.8	Statistic Techniques	87
4.9	Exploratory Data Analysis (EDA)	102
4.10	Chapter Summary	105
<b>5</b>	<b>RESULT AND DISSCUSION</b>	
5.0	Introduction	107
5.1	Demographic Profile of Respondents	108
5.2	Descriptive Statistics for Key Independent Variables	110
5.2.1	Online Shopping Orientations	111
5.2.2	Perceived Behavioural Control	114
5.2.3	Online Shopping Perceived Benefits	124
5.3	Level of Purchase Intention and Direction Attitude toward Online Shopping	131
5.4	Relationship between Online Shopping Orientations, Perceived Benefits, Demographic Characteristics, and Attitudes towards Online Shopping	138
5.5	Relationship between Perceived Behavioural Control, Attitudes, and Purchase Intention	147
5.6	Predicting Intention to Purchase Online	151
5.7	Chapter Summary	166
<b>6</b>	<b>SUMMARY, CONCLUSION AND IMPLICATION</b>	
6.0	Introduction	168
6.1	Summary of Finding and Conclusion	168
6.2	Implications and Recommendations	178
6.3	Limitations and Suggestions for Future Research	185
6.4	Chapter Summary	187
	<b>REFERENCES/BIBLIOGRAPHY</b>	189
	<b>APPENDICES</b>	215
	<b>BIODATA OF STUDENT</b>	233

## LIST OF TABLES

<b>Table</b>	<b>Page</b>
2.1 Malaysia's Statistic Regarding ICT Market and E-commerce Transaction	16
2.2 Differences between Utilitarian and Hedonic Consumers	26
4.1 Variables and Sources	75
4.2 Cronbach's Alpha Reliability Test Results	85
4.3 Distribution of Intention Score and the Levels of Intention	88
4.4 Distribution of Attitude Score and the Direction of Attitude	89
4.5 Strength of the R-value	91
4.6 Descriptive Analysis of Variables	103
5.1 Respondents' Demographic Profiles	109
5.2 Distribution of Respondents' shopping Behaviour	110
5.3 Responses of Items Measuring Online Shopping Orientations	114
5.4 Responses of Items Measuring Perceived Behavioural Control	120
5.5 Frequent of Internet Usage	123
5.6 Frequency Distribution of Online Shopping Perceived Benefits	130
5.7 Categories of Purchase Intention	132
5.8 Frequency Distribution of Items Purchase Intention	133
5.9 Direction of Students' Attitude towards Online Shopping	136
5.10 Partial Correlation between Utilitarian Orientations and Attitude	140
5.11 Partial Correlation between Hedonic Orientations and Attitude	142
5.12 Pearson Correlation between Perceived Benefits and Attitude	143
5.13 Pearson's Correlation Coefficients of Attitude and Perceived Benefits Dimensions	144
5.14 Estimates of Coefficients for the Model	146

5.15	Pearson Correlation between Perceived Control, Attitude, and Purchase Intention	148
5.16	Pearson Correlation between Intention and Attitude	150
5.17	Summary of Hypotheses Testing	151
5.18	Estimates of Coefficients First Model of Path Analysis	153
5.19	Estimates of Coefficients the Second Model of Path Analysis	156
5.20	Estimates of Coefficients for the Third Model of Path Analysis	158
5.21	Results of Path analysis	160

## LIST OF FIGURES

Figure	Page
3.1 Theory of Reasoned Action (TRA)	49
3.2 Theory of Planned Behavior (TPB)	52
3.3 Technology Acceptance Model (TAM)	55
3.4 Research Framework	61
4.1 Path Diagram of the First Model	99
4.2 Path Diagram of the Second Model	100
4.3 Path Diagram of the Third Model	102
5.1 Result of Path analysis	159



## LIST OF ABBREVIATIONS

TRA	: Theory Reasoned Action
TPB	: Theory Planned Behaviour
TAM	: Technology Acceptance Model
PC	: Personal Computer
IS	: Information System
ICT	: Information and Communications Technology
MSC	: Multimedia Super Corridor
IT	: Information Technology
B2C	: Business to Consumer
B2B	: Business to Business
SPSS	: Statistical Package for the Social Science
TNS	: Taylor Nelson Sofres
IDC	: International Data Corporation
UCLA	University of California, Los Angeles
FAQ	Frequently Asked Questions

## **CHAPTER 1**

### **INTRODUCTION**

Nowadays, Internet is not only a networking media, but it is also used as a means of transaction for consumers at global market. The usage of Internet has grown rapidly over the past years and it has become a common means for delivering and trading information, services and goods (Albarq, 2006).

According to the survey by A.C.Nielsen (2007), more than 627 million people in the world have done online shopping. A research by Forrester (2006) reported that e-commerce market would grow from \$228 billion in 2007 to \$288 billion in 2009. As reported by Jupiter Media Metrix (2005), the online retail sales in US amounted to USD65 billion in 2004, and this would likely reach USD117 billion in 2008. By 2010, e-commerce will account for \$316 billion in sales, or 13 percent of the overall retail sales. As a result of the survey, 61 percent of the online users in the US will make their purchases via the Internet in 2010, as compared to merely 46 percent in 2004.

Out of this number, university students contribute to about \$200 billion a year in the buying power to the US market, with an average student's available discretionary spending totalling to \$287 each month (Gardyn, 2002). Due to the students' purchasing power in the marketplace, it is critical for e-retailers and consumer behaviour marketers to fully understand the attitude and intention of this particular population towards online shopping. Furthermore, 90 percent of the university

students were reported to have a daily access to the Internet (Xu & Paulins, 2005). With the expansion of educational services in Malaysia, university students have become one of the important consumer market segments (Sabri, MacDonald, Masud, Paim, Hira, & Othman, 2008). Therefore, to successfully attract this particular group of population, the e-retail service providers must learn more about them, particularly in relation to their attitude towards online shopping, online shopping intentions, and their antecedents.

Many studies have concentrated on online shopping in the world. However, there is still a need for a closer examination of the online shopping intention in specific countries (Bobbit & Dabholkar, 2001; Goldsmith, 2002; Salisbury *et al.*, 2001). Considering that Internet shopping is still at the early stage of development in Malaysia, little is known about consumers' behaviour adopting this new shopping channel and the factors which influence this behaviour (Haque, Sadeghzadeh & Khatibi, 2006). According to Shwu-Ing (2003), a person's shopping behaviour is influenced by four major psychological factors, such as motivation, perception, belief and attitude.

The roles of a shopper's personal attitudes have been widely acknowledged in consumer decision-making and behavioural intentions (Shwu-Ing, 2003). In particular, attitude serves as the bridge between consumers' characteristics and the consumption that satisfies their needs (Armstrong & Kotler, 2000; Shwu-Ing, 2003). Moreover, consumers' characteristics, such as personality, as well as demographic and perception on online shopping benefits, have also been found to influence their online shopping behaviour (Cheung & Lee, 2003; Goldsmith & Flynn, 2004; Shwu-

Ing, 2003; Wolfinbarger & Gilly, 2001). Thus, identifying the relative importance of each determinant of choice towards a given action could be a useful step in understanding why such behaviour occurs. According to Ajzen (1985), perceived behavioural control has been argued to have an impact on the occurrence of such behaviour and thus, a predictor of behavioural intentions. Such intentions are important as they represent the best estimates of the future behaviour available to market researchers (Wright, Sharp and Sharp, 2002).

Meanwhile, behavioural intention is determined by an individual's attitude towards performing the behaviour. An individual's perception of the benefits of the behaviour, as well as the individual's self efficacy and ability to control both internal and external resources on the behaviour in performing the intended behaviour, led to the development of the Theory of Reasoned Action (TRA), Theory of Planned Behaviour (TPB) and Technology Acceptance Model (TAM). From an e-business perspective, understanding these TRA, TPB, and TAM could provide a valid basis for explaining and predicting consumers' intention towards adopting online shopping behaviour (Bobbitt and Dabholkar, 2001; Choi and Geistfeld, 2003; Goldsmith, 2002; Netemeyer, Andrews, and Durvasula, 1993; Pavlou and Chai, 2002; Salisbury, Pearson and Miller, 2001). Such understanding would enable e-commerce managers to gain better insights into the consumers' online shopping motivation and facilitate them in developing effective strategies towards increasing website traffic flow (Aldridge, Forcht and Pierson, 1997; Wysocki, 2000).

The main aim of this study is to investigate purchasing intention of post-graduate students at University Putra Malaysia, with a particular emphasis on understanding

and evaluating the factors which directly or indirectly influence their purchasing intention by measuring the attitude towards online shopping.

### **1.1 Problem Statements**

Online shopping in Malaysia is a new technology breakthrough since it has just begun to assault the Malaysia retailing sector with online shopping services (Haque *et al.*, 2006). In order to increase online shopping in Malaysia, understanding consumer online shopping behavior and factors influencing this behavior when shopping online should be given priority.

Research indicates that 81 percent of those who browse web sites for goods and services do not actually make an online shopping (Gupta, 1995; Kline, 1998; Shim, Eastlick, Lotz, & Warrington, 2001). Interestingly, Taylor Nelson Sofres (2002) reported that only 3 percent of Malaysians Internet users shopped online in May 2002, a reduce of 1 percent compared to 4 percent in 2001 (Chua, 2008; Hamid & Khatibi, 2006). Majority Malaysians (76 %), specially younger people were using the internet for non-shopping activities such as seeking information, playing games, entertainment, or communicating with friends, etc. (Hamid & Khatibi, 2006).

According to Jariah, Husniyah, Laily and Britt (2004), with the expansion of educational services in Malaysia, university students become one of the most important market segments for two reasons; First, this group has money and shopping interests. Second, this is the segment of the population that has the potential of earning a greater income than other segments of the population.

Therefore, it will be of great significance to find out the factors which influence students' intention to shop online if we want to expand the group of online buyers and the volume of e-commerce. Unfortunately, studies examining students' behavior towards online shopping in the Malaysian environment are of a limited number (Haque *et al.*, 2006).

Consumers' attitude towards online shopping is known as the main factor that affects online shopping behavior (Michael, 1998). Attitude directly influence decision making and also is central to a buyer's shopping behavior. Consequently, the group with more positive attitude should be the target market (Shwu-Ing, 2003). According to study conducted by Haque *et al.* (2006), attitude towards online shopping is considerably quite negative among Malaysians. Therefore, it is important to recognize that numerous factors precede attitude formation and change.

The process of consumers' decision-making on online shopping relates to the experiences and satisfaction they perceive while shopping. The Malaysian Internet users conducting online shopping seek benefits such as cost saving, convenience, cheaper price, a way to easily search for information, and a 24-hours services (Haque, Mahmud, Tarofder, & Ismail, 2007). As pointed out by Rodgers and Thorson (2000), various consumers' motives affect attitude towards online shopping so internet users become more used to this medium. So, to understand the driving forces toward online shopping and their relationship with attitude, it is important to recognize how students make their online purchase.

Consumer shopping behaviour is strongly influenced by consumers' characteristics. In addition, attitudes serve as the bridge between consumers' characteristics and online shopping behavior. As mentioned by Defeng, Bingchuan, and Li (2006) attitude towards online shopping is influencing by demography factors, such as gender, age and income. In addition consumers have different personality, which may influence how they perceive their online shopping behavior (Wolfenbarger & Gilly, 2001). Hence, consumer personality that can be classified into utilitarian orientation and hedonic orientation lead to different shopping behaviors.

Finally, opportunities of online shopping can be restricted by internal and external constraints on behavior (Karami, 2006). It is important in explaining human behavior since an individual who has the intention of accomplishing a certain action may be unable to do so because his or her environment prevents the act from being performed. Moreover, there are some barriers which have contributed to the unwillingness of Malaysians to shop online because they afraid their personal information will be stole or misused by others (Haque *et al.*, 2006). Despite the high potential of online shopping in Malaysia, there is still a lack of understanding concerning the online shopping and its impact on marketing (Chua, Khatibi, & Ismail, 2006). Consequently a framework is needed to structure the complex system of effects of these different factors, and develop an in-depth understanding of consumers' attitudes towards Internet shopping and their intentions to shop online.

## **1.2 Research Question**

Research questions are posed to obtain the relevant information required to fulfill the objectives. The proposed questions to be answered in this research are as follow:

1. What is the level of consumers' purchase intention and direction attitude towards online shopping?
2. Are there any relationships between utilitarian orientation, hedonic orientation, demographic characteristics, online shopping perceived benefits, and attitudes?
3. Are there any relationships between perceived behavioral control, attitude, and purchase intention?
4. Would consumers' purchase intention be predicted by attitude, shopping orientations, perceived behavioral control, demographic characteristics and online shopping perceived benefits directly or indirectly?

## **1.3 Objective**

The purpose of this research is to investigate the purchase intention among postgraduate students at Universiti Putra Malaysia. More specifically, the objectives of this study are:

1. To determine consumers' purchase intention and direction attitude towards online shopping.
2. To determine the relationships between utilitarian orientation, hedonic orientation, demographic characteristics and online shopping perceived benefits and attitudes.



3. To determine the relationships between perceived behavioral control, attitude, and purchase intention.
4. To determine whether, or not, consumers' purchase intention would be predicted by shopping orientations, perceived behavioral control, demographic characteristics, and online shopping perceived benefits directly or indirectly by attitude.

#### **1.4 Hypotheses**

- H1. There is positive relationship between the utilitarian orientation and the attitude towards online shopping.
- H2. There is positive relationship between the hedonic orientation and the attitude towards online shopping.
- H3. There is positive relationship between the online shopping perceived benefits and the attitude towards online shopping.
- H4. There is relationship between the demographics characteristics (age, gender and income) and the attitude towards online shopping.
- H5. There is positive relationship between the perceived behavioral control and the purchase intention.
- H6. There is positive relationship between the attitude and the purchase intention.

#### **1.5 Significance of Study**